

United States Department of the Interior

U.S. GEOLOGICAL SURVEY

Water Resources Division
5338 Montgomery Blvd. NE, Suite 400
Albuquerque, NM 87109-1311

July 24, 2002

Ms. Petra Sanchez U.S. Environmental Protection Agency Mail Stop SF-LT 1445 Ross Avenue Dallas, Texas 75202

Dear Petra:

We have compiled the data from our June 27, 28, and July 2, 2002 soil-gas sampling work in Last Cruces, New Mexico and, by this letter, are providing that compilation to you. This data compilation is being provided to EPA for use in their investigation of the Griggs-Walnut superfund site.

What follows is a brief background summation and descriptions of sampling methods and data collected at the sites.

Tetrachloroethylene (PCE) has been found in ground water at the Griggs and Walnut Ground-Water Plume Superfund site in Las Cruces, New Mexico. The U.S. Environmental Protection Agency (USEPA) is performing a contaminant-source investigation for the site. Potential sources of PCE include former and current dry-cleaning properties near the area of known PCE contamination in ground water. The USEPA asked the U.S. Geological Survey, New Mexico District (USGS), to perform soil-gas surveys at eleven former and present dry-cleaning properties to determine if PCE vapor is present in soil.

Direct-Push Drilling and Sampling

Direct-push drilling and soil-gas sampling were conducted with a model 6610DT Geoprobe. The Geoprobe's hydraulic pressure and hammer action was used to advance hollow steel drill rod (2-inch outside and 0.75-inch inside diameters) into the soil. No special tools were required to drive the drill rod through asphalt. The leading end of the drill rod was equipped with an expendable steel tip and the threaded drill rod joints were sealed using Gas Teflon tape to prevent the introduction of ambient air into the soil-gas samples. Drill rod was advanced into the soil to a depth of about 12 feet. The drill rod was then pulled up about 4 inches leaving the expendable tip and exposing the leading end of the drill rod to soil gas. Teflon sample tubing, fitted with a sampling septum, was then connected to the top of the drill rod using a hose fitting adapter

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